

REMARKS

Claims 1, 7-9, 15, 16, 19-21, 23, 48-49, 55, 58, 60 and 62 are pending in the application. Claim 9 was indicated to encompass allowable subject matter. Applicants respectfully request reconsideration of the other claims, in view of these remarks.

The Office Action mailed January 11, 2005, rejected claims 1, 7-8, 15, 16, 19-21, 23, 48-49, 55, 58, 60 and 62 over a new primary reference, U.S. Patent No. 6,051,428 ("Fong"). As noted at page 4 of the Action, Fong does not teach or suggest the use of herpes simplex virus vectors expressing a soluble co-stimulatory factor in the B7 family, as taught by applicants and as recited in the instant claims. The Action cites Sturmhoefel *et al.*, *Cancer Res.* 59: 4964-72 (1999) ("Sturmhoefel"), for teaching herpes simplex virus vectors that express B7-1-Ig and B7-2-Ig, which are soluble co-stimulatory factors in the B7 family. Applicants have determined, however, that Sturmhoefel is not prior art to this application.

More specifically, the instant application was filed on October 5, 2000, and claims priority to a U.S. provisional application filed on October 5, 1999. Applicants contacted the publisher of Sturmhoefel and confirmed that the cited article was not available prior to October 5, 1999. As set forth in the attached correspondence from the publisher, the October 1999 issue of *Cancer Research*, which includes Sturmhoefel, was not mailed until October 4, 1999; hence, Sturmhoefel was unavailable to the public until on or after October 5, 1999, the relevant priority date. Consistent with this conclusion is a copy of Sturmhoefel, obtained from the National Institutes of Health library and submitted presently, which shows that the NIH library did not receive the *Cancer Research* issue in question until October 13, 1999. ✓

In view of this information, the rejections of the pending claims over a combination of references that includes Sturmhoefel should be withdrawn. As noted above, moreover, Fong does not teach or suggest the use of herpes simplex virus vectors expressing a soluble co-stimulatory factor in the B7 family, as recited in the instant claims. Instead, it is Applicants who teach the advantages of treating tumors with such a gene therapy method.

As the specification discloses at pages 3 and 4, for example, the expression of a soluble co-stimulatory factor in the B7 family in the tumor environment allows for T-cell

activation in at least two ways. First, the soluble co-stimulatory factors provide dendritic cells and other APCs, surrounding or infiltrating the tumor, for increased T-cell stimulation. Second, the soluble co-stimulatory factors assist tumor cells in functioning as APCs because most tumor cells do not express B7 molecules. Additionally, the presence of soluble co-stimulatory factors may reverse the anergic state of primed T-cells to an activated state.

Because Fong alone does not suggest the invention recited claims 1, 7-8, 15-16, 20-21, 23, 48-49, 55, 58, 60 and 62, the rejection of those claims should be withdrawn. Because the combination of Fong and Whitely does not teach or suggest the invention recited in claim 19, the rejection of that claim should be withdrawn, too.

In view of the foregoing, Applicants believe that the application is in condition for allowance, and an early notice to that effect is earnestly solicited. If there are any questions regarding this submission, or if any issues remain, the Examiner is invited to contact the undersigned by telephone, to advance prosecution of the application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date May 3, 2005

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McKeiver Jr., Eugene

From: Robinson@aacr.org
Sent: Tuesday, April 12, 2005 12:35 PM
To: McKeiver Jr., Eugene
Subject: Oct 1 1999 Cancer Research mail date ✓

Eugene,
It was easier to track down than I thought.

Per your request, the official mail date for the October 1, 1999 issue of Cancer Research was October 4, 1999.

Please let me know if you have any additional questions,
Morgan Robinson

[illegible]

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